

### **REMARKS**

Reconsideration and allowance of the subject application in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-32 are pending in this application. By this Amendment, claims 1, 3, 6, 7, 19, 23, and 25 are amended.

### **Rejections Under 35 USC 102**

The Patent and Trademark Office (PTO) rejects claims 1-3, 6, 8-11, 14, 16-23, 25, and 26 under 35 USC 102(e) as anticipated by Myr (US 6,677,946).

Based upon the foregoing amendments, all amended and unamended claims are believed patentable over Myr for the following reasons.

As amended, independent claim 1 recites a method for obtaining traffic information using billing information of a mobile terminal, comprising, *inter alia*, the step of “receiving call data based on a telephone call made by the terminal on a highway” (emphasis added). Myr fails to disclose, teach, or suggest this feature.

Applicants respectfully submit that unlike Applicants’ method that only collects location information on terminals that have placed calls on a specific highway,” Myr, based upon Fig. 2 and the disclosure at column 6, lines 62-66, appears to suggest that “the Traffic Service Center (TSC) compiles a Current Phone List (CPL) consisting of cell phone records ...of all available active cell phones in the system database....” only disclose “tracking all in-vehicle cell phones within a given area” (emphasis added).

Applicants respectfully submit that the claimed method that detects when a terminal places a call on a particular highway, and then provide traffic conditions on that highway based upon the changing location of that terminal, is clearly distinguished from the traffic gathering system of Myr that starts out by collecting terminal information on all terminals in a network database, then determining where the terminals are, and then generating traffic data if the terminal appears to be on a specific highway.

A rejection based on 35 U.S.C. §102 requires every element of the claim to be included in the reference, either directly or inherently. Accordingly, because Myr does not disclose, teach or suggest each and every feature recited in amended claim 1, Applicants' recited method is distinguished over Myr and therefore the rejection of amended claim 1 under 35 U.S.C. §102(b) is improper. Applicants respectfully submit, therefore, that independent claim 1 is patentable over Myr.

Amended independent claim 19 recites a method that includes "receiving call data based on a telephone call attempted by the terminal on a managed highway," and is likewise patentable over Myr.

Claims 2-3, 6, 8-11, 14, 16-18, 20-23, 25, and 26 depend from either independent claim 1 or independent claim 19 and are likewise patentable over Myr at least for their dependence on an allowable base claim, as well as for additional features they recite.

For example, claim 2 recites "wherein the base stations are installed side-by-side and managed on a highway," and is based on the specification at page 8, paragraph [60], stating that "[a]s the car does not need to be monitored in all directions because it moves in one direction in case of the first to fourth base stations 151 to 154 installed on the highway, the base stations are arranged side by side so that one of three base station sectors can be assigned to the highway in hardware." Myr fails to disclose this feature.

Still further, claims 6 recites "wherein a predetermined number of sample objects are selectively extracted on a section-by-section basis or in each section when the terminal information is extracted from the received call data." The claim method is distinguished from Myr in that Myr appears to collect location data on all active cell phones, and does not appear to limit information extraction based upon a predetermined number of sample objects on a section by section basis.

Further still, claim 25 recite conditions for terminating the tracking of the terminals when the terminal exits the highway, a feature clearly not disclosed by Myr that continues to track the location of all cell phones in a wide geographical location.

Based upon the above disclosure, withdrawal of the 102 rejection over Myr is respectfully requested.

### **Rejections Under 35 USC 103**

Claims 4, 5, 7, 12, 13, 15, 24, and 27-32 stand rejected under 35 USC 103(a) as obvious over Myr.

Claims 4, 5, 7, 12, 13, 15, 24, and 27-28 depend from either independent claim 1 or 19, which as presented above is patentable over Myr. Applicants respectfully submit that claims depending therefrom are likewise patentable over Myr, at least based upon their dependence on an allowable base claim.

Independent claim 29 recites a traffic information collection method that includes “setting a reference value of a traffic state according to the number of generated telephone calls associated with a corresponding base station on a time zone-by-zone basis” (emphasis added). The Examiner alleges that “the reference value and time would be a matter of obvious engineering design choice and would not render the instant invention patentably distinct.” Applicants respectfully disagree.

The method of Myr does not rely on call data of specific base stations. Indeed, based upon Myr, a cell phone does not need to be in a call or to have initiated a call, to have its location determined. Accordingly, Myr fails to disclose, teach, or suggest a method based upon a number of generated calls associated with a “corresponding base station.” Applicants submit therefore that the setting of any reference value of a traffic state cannot be an “obvious engineer design choice,” at least based upon Myr’s method that is completely unrelated to the claimed method.

Notwithstanding the failure of Myr to render obvious the setting of a reference value, as presented above, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness for the remaining three elements of independent claim 29. On page 4 and 5 of the Office Action, the Examiner addresses only one of four claimed elements, as if the other three elements were previously addressed.

The method of independent claim 29 recites four steps, including:

setting a reference value of a traffic state according to the number of generated telephone calls associated with a corresponding base station on a time zone-by-zone basis;

extracting telephone calls associated with the base station at predetermined time intervals;

comparing the number of the extracted telephone calls with the reference value; and

setting a traffic class of a corresponding base station area according to an increase or decrease based on a result of the comparison.

Nowhere in the Office Action does the Examiner establish a *prima facie* case of obviousness for the remaining three elements of the claim. If the PTO maintains the rejection of claim 29 over Myr, the PTO is respectfully requested to identify, preferably using column and line, where disclosure of each of the above-mentioned subject matter is to be found.

Therefore, Applicants respectfully submit that claim 29 and claims 30-32 that depend therefrom are patentable not only due to the failure of Myr to disclose, teach or motivate all recited features of the claims, but are also patentable based upon failure of the PTO to identify each and every claimed element. Accordingly, withdrawal of this rejection is respectfully requested.

### **Conclusion**

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

The Examiner is invited to telephone the undersigned attorney of record to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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